

LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

M.Sc. DEGREE EXAMINATION – MEDICAL LAB. TECHNOLOGY

SECOND SEMESTER – APRIL 2010

ML 2953 - METHODOLOGY OF MEDICAL LABORATORY RESEARCH

Date & Time: 21/04/2010 / 1:00 - 4:00

Dept. No.

Max. : 100 Marks

Answer **ALL** questions

PART-A

10 × 2 = 20 Marks

1. What is meant by thrust area?
2. What is scatter diagram? Draw and explain.
3. What is citation index?
4. Expand: IPR, ICMR, DRDO and TNSCST
5. Distinguish biased from unbiased data.
6. Differentiate research method from research methodology.
7. Distinguish null hypothesis from alternate hypothesis.
8. What is meant by impact factor?
9. What are various types of objectives in research?
10. Distinguish positive from negative correlation.

Answer any **FOUR** questions

PART –B

4 × 10 = 40 Marks

11. Describe the principles of patenting.
12. What are the ethical issues in research?
13. Summarise the preparation of project proposal.
14. X values refers to the weight in children and Y refers to the weight in children under malnutrition. Verify by applying student 't' test, whether there is significant difference between the paired observations provided below:

X = 12 18 16 15 12 10 20 17

Y = 6 10 9 8 9 8 12 10 Table value= 2.84.

15. Describe various good laboratory practices.
16. Explain the research process with a flow chart.

Answer any **TWO** questions

PART – C

2 × 20 = 40 Marks

17. In an experiment on immunization of cattle against anthrax, following results were obtained.

Type	Affected	Not affected
Inoculated	22	45
Not-inoculated	44	18

Calculate **Chi-square value** (Table value is 3.84 at 5% level of significance).

18. Give an account of research programs in India and abroad.
19. Describe kinds of research programmes in India and abroad.
20. Write an essay on preparation of a manuscript for publication.
